

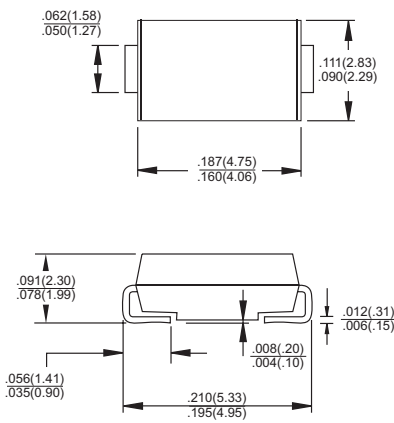


<div>TSC</div> <div></div>	<div>HS2AA THRU HS2MA</div> <div>1.5 AMPS. High Efficient Surface Mount Rectifiers</div>										
<div></div>	<div>Voltage Range</div> <div>50 to 1000 Volts</div> <div>Current</div> <div>1.5 Amperes</div>										
<div>Features</div> <div><div>✧ Glass passivated junction chip.</div><div>✧ For surface mounted application</div><div>✧ Low forward voltage drop</div><div>✧ Low profile package</div><div>✧ Built-in stain relief, ideal for automatic placement</div><div>✧ Fast switching for high efficiency</div><div>✧ High temperature soldering: 260°C/10 seconds at terminals</div><div>✧ Plastic material used carries Underwriters Laboratory Classification 94V-O</div></div>	<div>SMA/DO-214AC</div> <div></div> <div>Dimensions in inches and (millimeters)</div>										
<div>Mechanical Data</div> <div><div>✧ Cases: Molded plastic</div><div>✧ Terminals: Solder plated</div><div>✧ Polarity: Indicated by cathode band</div><div>✧ Packing: 12mm tape per EIA STD RS-481</div><div>✧ Weight: 0.064 gram</div></div>											
<div>Maximum Ratings and Electrical Characteristics</div> <div>Rating at 25°C ambient temperature unless otherwise specified.</div> <div>Single phase, half wave, 60 Hz, resistive or inductive load.</div> <div>For capacitive load, derate current by 20%</div>											
Type Number	Symbol	HS 2AA	HS 2BA	HS 2DA	HS 2FA	HS 2GA	HS 2JA	HS 2KA	HS 2MA	Units	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current See Fig. 2	I _(AV)	1.5								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50								A	
Maximum Instantaneous Forward Voltage @ 1.5A	V _F	1.0		1.3		1.7		V			
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	I _R	5.0 100								uA uA	
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50					75		nS		
Typical Junction Capacitance (Note 2)	C _j	50					30		pF		
Maximum Thermal Resistance (Note 3)	R θ _{JA}	90								°C/W	
Operating Temperature Range	T _J	-55 to +150								°C	
Storage Temperature Range	T _{STG}	-55 to +150								°C	

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 2. Measured at 1 MHz and Applied $V_R=4.0$ Volts
 3. Mounted on P.C.B. with 0.2"x0.2" (5 x 5 mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (HS2AA THRU HS2MA)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

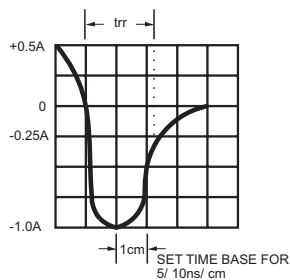
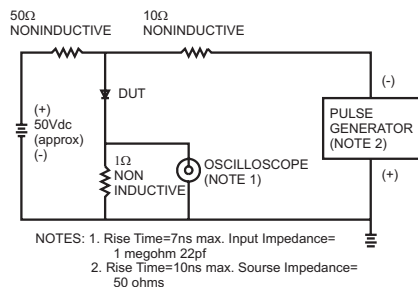


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

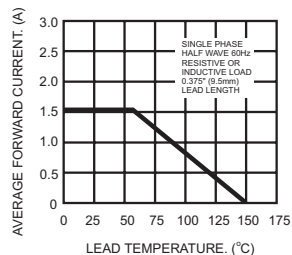


FIG.3- TYPICAL REVERSE CHARACTERISTICS

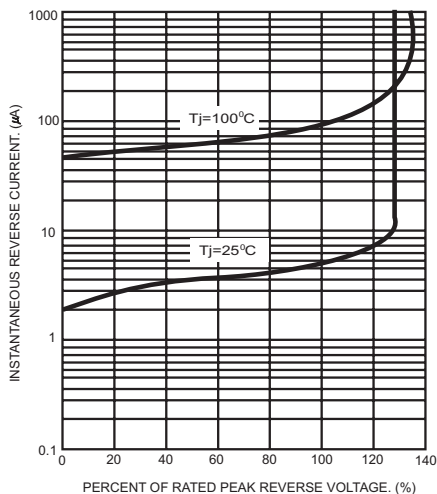


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

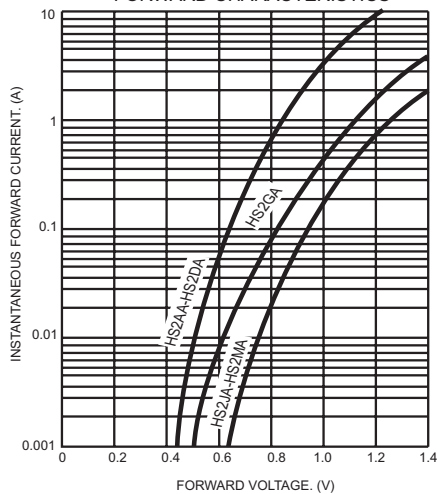


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

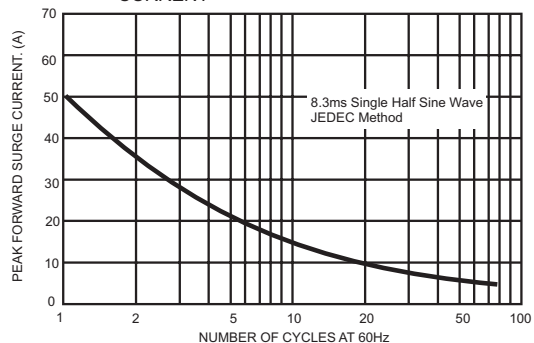


FIG.6- TYPICAL JUNCTION CAPACITANCE

